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State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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Salt Lake City, Utah 84180-1203
801-538-5340

May 15, 1991

Mr. Dan Bauer
Plant Manager
Akzo Salt of Utah
1428 James Palmer Rd.
Lake Point, Utah 84074

Dear Mr. Bauer:

Re: Review of Notice of Intention to Commence Large Mining Operations, Akzo Salt of Utah, Timpie Solar Ponds, M/045/030, Tooele County, Utah

The Division of Oil, Gas and Mining (Division) has completed its preliminary review of Akzo Salt of Utah's (Akzo's) Notice of Intention to Commence Mining for the Timpie Solar Ponds operation, received March 11, 1991. Specific sections of this submission will require revision or additional explanation before the plan can be determined complete and technically adequate. Please respond to the following Division comments:

R613-004-105. Maps, Drawings and Photographs.

Only the Ownership Location Map, out of the three maps submitted, contains a border clearly defining the affected area. The surface facilities are encompassed within a 153 acre area, but it is unclear if the entire 153 acres are or will be disturbed. A disturbed area border on the site facilities map and pond design map should be provided. Several different borders may be needed to describe areas which have not been disturbed by the operator since the Utah Mined Land Reclamation Act, areas which are currently disturbed and areas which will be disturbed in the future.

The plan indicates that the dikes have gates built into them, but their number and location was not provided in this submission. A typical design specification drawing of these gates and their locations should be provided. Typical cross sectional drawings of the main and secondary dikes should also be provided.

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A map indicating the reclamation treatments for the various areas at the facilities site should be provided. These treatment areas would include: no reclamation, regrading, ripping, seeding, topsoiling, etc.

R613-004-106. Operation Plan.

The plan lists the total area as 17,253 acres, with 17,100 acres comprising the ponds and 153 acres comprising the facilities. It is unclear whether or not the facilities are disturbing the entire 153 acres at this time or if they will in the future. This needs to be clarified.

There is no mention of where materials for dike construction originated from. In our conversations, you indicated that some dikes were built with materials in place and other dikes contained a clay core which may have come from a borrow area. Please provide this information.

Very little information regarding the soils in and around the plant facilities area has been provided. The characteristics of the disturbed and undisturbed soils (nutrient content and salt content) in this area should be provided as well as information describing the extent of the disturbed area(s). Are there borrow areas at the facilities area which could be used to reclaim already affected areas?

The site facilities map lists a tonnage and an expanded storage tonnage for each of the washed bulk salt storage areas. Do either of these tonnages reflect what is typically present at these storage areas? How are these storage areas utilized (i.e., in cycles, simultaneously, seasonal, etc.)?

R613-004-107. Operation Practices.

The operator should describe how the salt storage areas will be kept from impacting unaffected areas via water vectors and spillage. If any new areas are to be disturbed, the plan should include the salvage and storage of topsoil material where possible and feasible. The plan contains no reference to concurrent reclamation and although this practice is encouraged, it may not be applicable to this operation. The plan should indicate whether or not concurrent reclamation can or will be used.

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R613-004-109. Impact Assessment.

The plan should describe any steps taken by the operator to mitigate the impacts of the salt mining on the adjacent Timpie Springs Waterfowl Management Area. The plan should also describe the steps taken to mitigate the operation's impacts on the soil resources at the facilities site.

R613-004-110. Reclamation Plan.

The plan should describe the final disposition of all dikes (i.e. main and secondary, with/without gates, with/without roads, etc.). A more detailed description of the final disposition of all plant facilities needs to be presented. This description should include the roads, salt washing plant, stacking conveyor, truck scales, residual salt stockpiles, stockpile foundations, substations, buildings, etc. A map of the facilities area describing the reclamation treatments and areas of their application may help provide this description (see comments in section R613-004-105).

The plan excludes several of the structures at the facility area from final reclamation due to post-mining use. Please provide justification for each item with a proposed post-mining use.

The seed list should be amended to include the following shrubs and forbs: Alkali Sacaton, Crested Wheatgrass, Four Wing Saltbrush, Rabbitbrush, Sagebrush and Yellow Sweetclover.

R613-004-111. Reclamation Practices.

The manner in which salt affected soils at the facilities site will be reclaimed needs to be described. This is especially relevant for the salt storage areas.

The dimensions, locations and general construction of all roads which will be reclaimed should be presented. The same details should also be provided with respect to the stockpile pads/foundations. This information is relevant to the calculation or validation of an accurate reclamation estimate.

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Upon final reclamation, all gates in the dikes are to be left open to allow the impoundments to be self-draining. The manner of construction, as well as the number and location of these gates should be provided. A typical design drawing of the gates should also be provided (also mentioned in R613-004-105).

R613-004-112. Variance.

The Division acknowledges a viable post-mining use of flood protection for the northern exterior dike. **This dike is hereby granted a variance from the reclamation requirements.**

The variance for the other dikes and gates cannot be granted until the information requested, regarding their construction, has been received and reviewed by the Division. Approval of a variance for the structures and equipment with a proposed post-mining use will be withheld until justification for each item has been provided. **A variance for topsoil redistribution and revegetation on the solar pond areas is hereby granted.** A variance for topsoil distribution at the facilities area will be withheld, pending review of the additional information requested.

R613-004-113. Surety.

This submission contained no estimate of a reclamation surety. The additional information requested must be provided in order for the Division to be able to calculate or validate an estimate.

R613-004-115. Confidential.

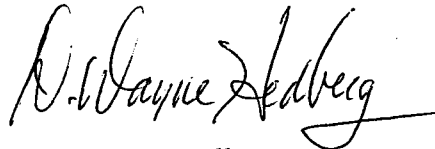
The operator indicated the submission contained confidential information, but no specific sections, drawings, etc. were identified as being confidential. Please clarify this by defining which information you wish to be classified as confidential. Please be advised that pursuant to Title 40-8-12.5(2), only information relating to the location, size, or nature of the deposit that is marked confidential by the operator can be protected as confidential information by the Board and Division.

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At this time, the Division is unable to complete this review or proceed toward issuance of tentative approval of the application as submitted. Our review process will be suspended until we receive AKZO's response to our initial review of the permit application.

Thank you for your cooperation in completing this permitting action. If you have any questions in this regard, please contact me or Tony Gallegos, of the Division.

Sincerely,

A handwritten signature in cursive script, reading "D. Wayne Hedberg". The signature is written in dark ink and is positioned above the printed name and title.

D. Wayne Hedberg
Permit Supervisor/Hydrologist
Minerals Regulatory Program

jb
cc: Brent Bradford, DEH
Jerry Mansfield, State Lands
Dean Zeller, BLM, Pony Express RA
Lowell Braxton, DOGM
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